

Remarks

Claims 1-20 are at issue. Claims 1, 2, 4, 6-8, 13-14, 16-20 stand rejected based on statutory double patenting. Claims 1-2, 4, 6, 8-13 & 16-20 stand rejected under 35 USC 103 (a) as being unpatentable over McDermott (US 5,417,928) in view of Hughes (US 4,074,203). Claim 3 stands rejected under 35 USC 103 (a) as being unpatentable over McDermott (US 5,417,928) in view of Hughes (US 4,074,203) and further in view of Lynch et al (5,836,173). Claim 5 stands rejected under 35 USC 103 (a) as being unpatentable over McDermott (US 5,417,928) in view of Hughes (US 4,074,203) and further in view of Rockenfeller (4,461,756). Claims 7 & 14-15 stand rejected under 35 USC 103 (a) as being unpatentable over McDermott (US 5,417,928) in view of Hughes (US 4,074,203) and further in view of Stone (4,523,315).

Statutory Double Patenting

The present application claims priority off of US Patent No. 6,658,038 (App. No. 10/198,594) and therefore this application and the application that matured into US 6,658,038 are co-pending applications. They are owned by the same entity and have the same inventors. Therefore the statutory double patenting rejection is inappropriate (Otherwise every continuation, divisional and continuation-in-part would be barred by the statutory double patenting provision). This rejection must be withdrawn.

Priority

The Examiner does not have the authority to determine which claims have priority. The applicant rejects the determination of priority.

Claim Objections

Claim 10 has been amended to depend from claim 9.

Substantive Rejections

First, the applicant would like to point out the inconsistencies in the Office Action. Claims 1, 2, 4, 6-8, 13-14 & 16-20 were rejected as being the same invention as that claimed in US 6,658,038. Yet, all these claims stand rejected based on another reference. This is not possible unless the Patent Office is contending that it made a mistake when issuing US 6,658,038. It would save both Patent Office resources and the applicant's resources if these logically inconsistent rejections were screened before the applicant has to respond to them. One or the other or both of these rejections are clearly wrong. The applicant should not have to waste their time sorting this out for the Patent Office.

Second, the applicant would like to point out that the present application is directed to generating excited oxygen using an optical pump and using this to form a laser. McDermot is not directed to a laser. Second McDermot does not have an optical pump because he is not using this method to excite the oxygen. McDermot uses chlorine gas and basic hydrogen peroxide in a chemical reaction to produce excited oxygen. See Col. 4, lines 13-33. This defeats the whole purpose of the present invention which is to produce excited oxygen without toxic chemicals (See Page 2, lines 12-17), using an optical excitation. The Office Action also cites Hughes who is directed to an elliptical beam amplifier. The Office Action states that the Hughes teaches how to excite oxygen using a optical pump. Even, if you grant this point to the Patent Office, which is questionable it does not show how this can be used with chemical generation system of McDermott. McDermott already teaches generating excited oxygen with a chemical reaction.

Claim 1 requires an optical pump connected to a cryoreactor. McDermott does not have a cryoreactor. The Examiner points to Col. 2, lines 52-55, however this section just describes a standard chemical reaction chamber and does not mention anything about it be cryogenic. The whole reason it is called a cryoreactor is the reactor works at liquid oxygen temperatures. Liquid oxygen is not mentioned in McDermott or Hughes. There is no explanation of how the optical pump of Hughes can be combined with McDermott's reactor (how does the light get into the reactor). The

Patent Office has just pulled together a couple of references that are only vaguely related to the present application, ignored their teachings and just pointed out that some of the terms are similar. The Patent Office has failed to provide a prima facie case of non-obviousness. Claim 1 is clearly allowable.

Claim 2 requires liquid oxygen. Liquid oxygen is not mentioned in either prior art reference. Claim 2 is clearly allowable.

Claim 3 requires supercritical oxygen. This is not mentioned in either prior art reference. Claim 3 is clearly allowable.

Claims 4-8 are allowable as being dependent upon an allowable base claim.

Claim 9 requires that the cryoreactor have a waveguide. This is not mentioned in either prior art reference. Claim 9 is clearly allowable.

Claims 10-12 are allowable for the same reasons as claim 9.

Claim 13 requires exciting oxygen with an optical pump in a reactor. This is clearly not shown in the prior art references. Claim 13 is clearly allowable.

Claims 14-16 are allowable for the same reasons as claim 13.

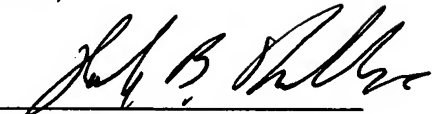
Claim 17 requires an optical pump connected to a cryoreactor. McDermott does not have a cryoreactor. The Examiner points to Col. 2, lines 52-55, however this section just describes a standard chemical reaction chamber and does not mention anything about it being cryogenic. The whole reason it is called a cryoreactor is the reactor works at liquid oxygen temperatures. Liquid oxygen is not mentioned in McDermott or Hughes. There is no explanation of how the optical pump of Hughes can be combined with McDermott's reactor (how does the light get into the reactor). The Patent Office has just pulled together a couple of references that are only vaguely related to the present application, ignored their teachings and just pointed out that some of the terms are similar. The Patent Office has failed to provide a prima facie case of non-obviousness. Claim 17 is clearly allowable.

Claims 18-20 are allowable for the same reasons as claim 17.

Prompt reconsideration, allowance and are respectfully requested.

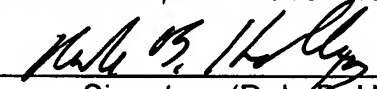
Respectfully submitted,

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I hereby certify that a Response is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, P.O. Box 1450, Alexandria, VA 22313-1450, on:

12/5/07
Date


Signature (Dale B. Halling)